

Business Metrics for Public Works Agencies

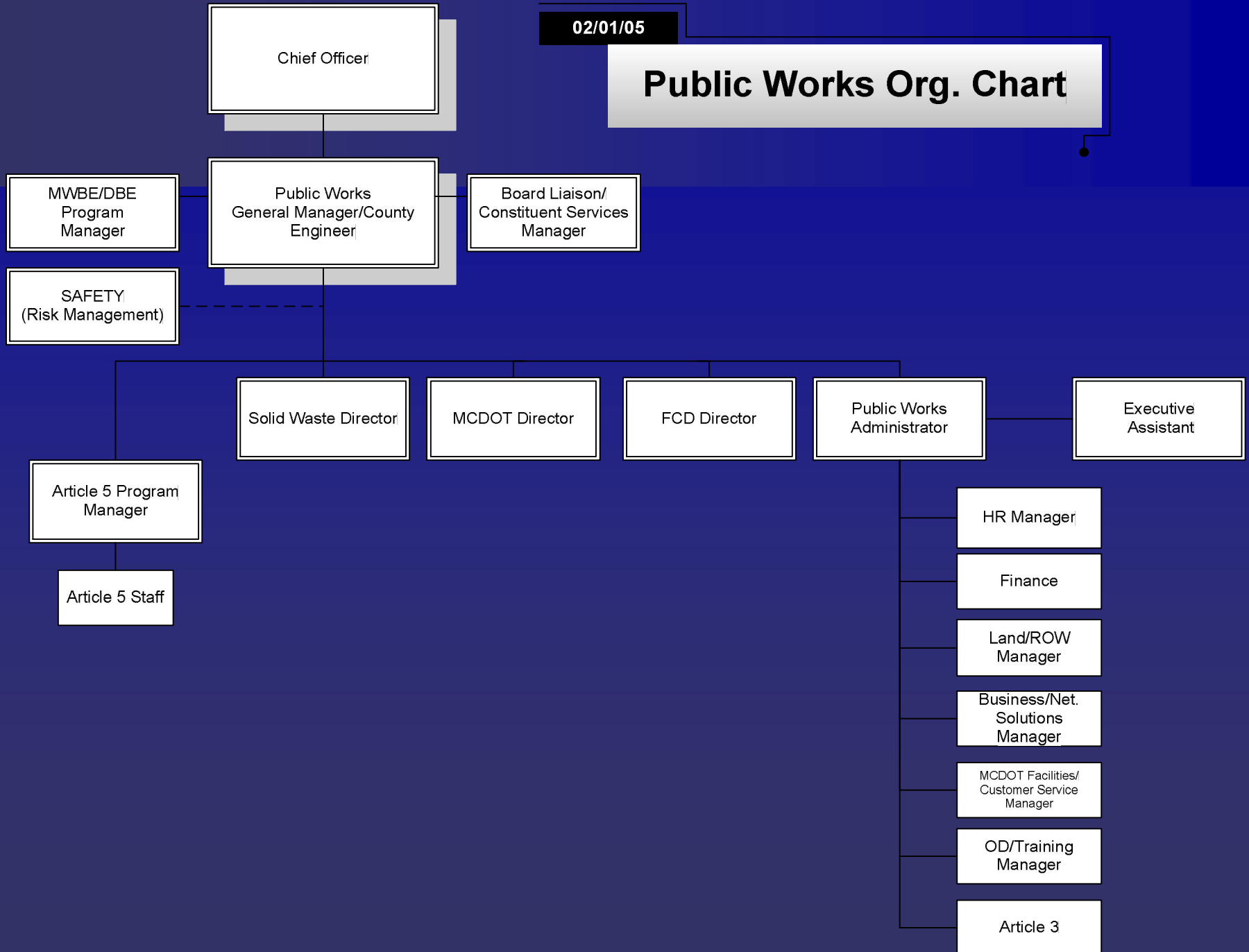
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02/01/05

Public Works Org. Chart



Business Metrics

- Business *n.* 1. Commercial, industrial or professional dealings; the buying or selling of commodities or services.
- Metric *n.* 1. A standard of measurement.

Goal: Establish standards for public sector business performance which allows comparison to ourselves and our peers.

Examples

Strategic Measures

Operational Measures

Financial Measures

Efficiency Measures

Private A/E Metrics Driven by Profit

(Medians)	2003	2004	% Change
Net Revenues per Total Staff	\$89,548	\$92,417	3%
Net Revenues per Direct Labor Hour	\$69.11	\$73.78	7%
Direct Labor Costs per Direct Labor Hour	\$24.36	\$25.71	6%
Total Costs per Direct Labor Hour	\$63.39	\$67.85	7%
Equity per Total Staff	\$16,213	\$17,510	8%
Operating Profit (Net Revenues)	9.11%	9.67%	6%
<u>Overhead Rate (before Incentive/Bonus)</u>	156.22%	162.78%	4%
<u>Chargeability (Payroll Dollars)</u>	60.16%	59.67%	-1%
Backlog Change	3.00%	5.00%	67%
Gross Revenues Change	5.00%	5.00%	0%
Staff Size Change	0.00%	0.00%	0%
Net Multiplier	2.89	2.92	1%
Average Collection Days	69.07	71.37	3%

Target Business Metric #1

Overhead Rate

GOAL: < 150%

All of those "costs of doing business" costs that are not directly charged to a project; indirect labor (supervision), utilities, insurance, training & education, etc.

$$\frac{(\text{Total Labor} + \text{Total Benefits} + \text{Total Non Labor})}{(\text{Direct Labor} + \text{Direct Non Labor})}$$



Overhead Rate					
Timeframe	Indirect Labor	Total Empty Benefits	Indirect Non-Labor	Direct Labor	Overhead Rate
FY 2004	\$ 3,509,685	\$ 2,842,186	\$ 4,067,853	\$ 7,157,656	145.6%

Target Business Metric #2

Personnel Utilization Rate

GOAL: > 60%

Total Labor Hours Assigned
to a Program ÷
Total Labor Hours Paid



Personnel Utilization Rate					
Timeframe	Non-O&M Direct Labor	O&M Direct Labor	Non-O&M Indirect Labor	O&M Direct Labor	Utilization Rate
FY 2004	\$ 146,749	\$ 62,719	\$ 104,820	\$ 9,434	64.7%

Public Sector Metrics Driven by Service

by Public Works Agency, Maricopa County

1. Overhead Rate: *Efficiency*
2. Personnel Utilization Rate: *Efficiency*
3. Construction Cost Growth: *Efficiency*
4. Capital Dollars Spent: *Financial*
5. Operating Dollars Spent: *Financial*
6. Cost of Project Delivery: *Efficiency*
7. Employee Satisfaction Rate: *Perspective*
8. Customer Satisfaction Rate: *Perspective*

Target Business Metric #3

Construction Cost Growth

GOAL: < 5%

([YTD Actual Costs per Project -
Unavoidable Change Orders] ÷
Awarded Value per Project) - 1



		Original Contract Amount	Revised Contract Amount	TOTAL Growth		
		\$ 88,504,293.21	\$ 92,697,778.77	\$ 4,193,485.56		
	Changed Scope	Changed Condition	Changed Design	Add-On by Partner	Other Growth	TOTAL Growth
	\$ 379,701.36	\$ 1,363,098.34	\$ 953,534.95	\$ 1,698,922.21	\$ (201,771.30)	\$ 4,193,485.56
% Growth	0.43%	1.54%	1.08%	1.92%	-0.23%	4.74%
		Avoidable Growth	1.28%	(7/2000 - 12/2003)		

Target Business Metric #4

Capital Dollars Are Spent

GOAL: > 85%

Capital Dollars			
Timeframe	Total CIP Dollars Budgeted	YTD CIP Dollars Expended	Percent Capital Dollars Spent
FY 2004	\$ 77,500,000	\$ 51,407,046	66.33%

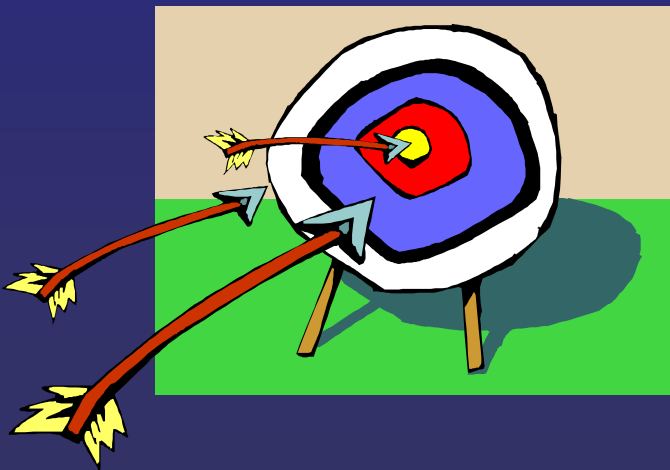


Target Business Metric #5

Operating Dollars Are Spent

GOAL: > 95%

Operating Dollars			
Timeframe	Total Operating Dollars Budgeted	YTD Operating Dollars Expended	Percent Operating Dollars Spent
FY 2004	\$ 48,288,136	\$ 43,851,554	90.81%



Target Business Metric #6

Project Delivery Cost

GOAL: < 18%

(Project Design Costs + Contract Oversight Costs + Administration Costs) ÷ Total Capital Project Costs



Project Delivery Cost					
Timeframe	Construction Design Costs	Staffing Costs	Total Project Cost	Land Costs	Percent Project Delivery
FY 2004	\$ 1,500,000	\$ 2,100,000	\$ 37,486,174	\$ 14,863,208	16%

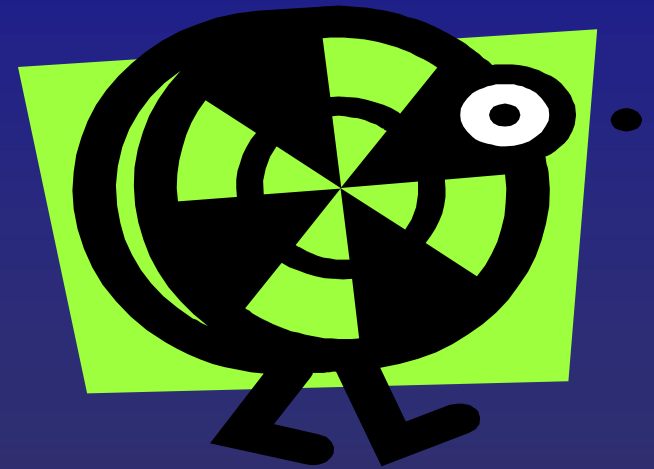
Target Business Metric #7

Employee Satisfaction Survey

Rating

GOAL: ≥ 5.5 out of 8.0 possible points

Employee Satisfaction Survey					
	FY00	FY01	FY02	FY03	FY04
Employees Responding	188	194	191	192	215
Effectiveness Efficiency	5.76	5.72	5.81	5.73	5.83
Management Practices	5.32	5.26	5.42	5.35	5.46
Customer Orientation	6.38	6.21	6.27	6.29	6.36
Communications	5.5	5.56	5.7	5.61	5.66
Growth/Advancement Opportunities	5.87	5.83	5.89	5.86	5.93
Benefits Compensation	5.29	5.16	5.45	5.21	5.34
Working Conditions	6.44	6.38	6.37	6.44	6.43
Satisfaction Score - All Items	5.69	5.62	5.76	5.68	5.76



Target Business Metric #8

Customer Satisfaction Survey Rating

GOAL: ≥ 6 out of 10 possible points



Customer Satisfaction Survey					
	FY00	FY01	FY02	FY03	FY04
Mean Customer Satisfaction Score	6.03	6.00	6.06		

Public Works Agency

Maricopa County

Department of Transportation (MCDOT)

Flood Control District of Maricopa County

		Goal	MCDOT	FCD	
1	Overhead Rate	< 150%	162%	146%	FY 04
2	Personnel Utilization Rate	> 60%	68%	65%	
3	Construction Cost Growth	< 5%	4%	0.3%	
4	Capital Dollars Spent	> 85%	66%	90%	FY 04
5	Operating Dollars Spent	> 95%	91%	95%	FY 04
6	Project Delivery Cost	< 18%			
7	Employee Sat Survey	>5.5 of 8		5.76	
8	Customer Sat Survey	>6 of 10		6.06	

SO WHAT??

- **Validates business efficiency/inefficiency**
- **Roadmap for improvement**
- **Makes privatization a non-issue**

Questions? Business Metrics for Public Works Agencies

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